

Appl. No. 10/822,511
Amdt. dated March 28, 2006
Reply to Office Action of November 29, 2006

Remarks

The present amendment responds to the Official Action dated November 29, 2005. A petition for a one month extension of the time to respond and authorization to charge Deposit Account No. 50-1058 the \$120 fee for this extension accompany this amendment. The Official Action rejected claims 1, 7, 8 and 11 under 35 U.S.C. 102(b) based on Tayloe U.S. Patent No. 5,095,500 (Tayloe). Claims 2, 3, 9, 10, 12, and 13 were rejected under 35 U.S.C. 103(a) over Tayloe in view of Larsson et al U.S. Patent No. 5,241,690 (Larsson) and Agrawal et al. U.S. Publication No. 2003/0142647 (Agrawal). Claims 4, 5, 14 and 15 were rejected under 35 U.S.C. 103(a) over Tayloe in view of Larsson and Agrawal in further view of Dent U.S. Patent No. 5,894,473 (Dent). These grounds of rejection are addressed below. Claims 1 and 7-11 have been amended to be more clear and distinct. Claims 1-14 are presently pending.

The Art Rejections

As addressed in greater detail below, Tayloe and the various combinations of Tayloe, Larsson, Agrawal and Dent relied upon in the Official Action do not support the rejections based thereupon should be reconsidered and withdrawn in light of the present amendment. Applicants do not acquiesce in the analysis of the above item made by the Official Action and respectfully traverse the Official Action's analysis underlying its rejections.

All of the rejections are based upon the application of Tayloe, the main reference relied upon by the Official Action. Tayloe addresses a "Cellular Telephone Diagnostic System". As stated in the first line of its Abstract, Tayloe addresses "A system and method of evaluating the radio coverage of a geographic area serviced by a digital cellular radio-telephone communication

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system" As further explained by the Abstract, mobile units are located when they receive calls from the base station. The signal quality is monitored and location and signal quality data are collected from the mobile units by the station. Then, the signal quality data is passed from the base station to a central operation and maintenance unit. Representations of the radio coverage characteristics, such as those illustrated in Tayloe's Figs. 2-6, are generated by the central operation and maintenance unit. With these representations, the system operator can quickly and efficiently diagnose coverage deficiencies and take necessary corrective action. Tayloe Abstract. As the system operator adopts modifications to the system, he or she can continue to observe the effects of such modifications.

Tayloe illuminates what kind of deficiencies he is talking about at col. 1, lines 18-30 where he considers the problem of "an area within a cellular radiotelephone system that provides poor service due to moderate levels of interference." Rather than addressing customer complaints or using drive team testing, Tayloe collects mobile unit data. Presumably the types of corrective actions might include building a new cell tower, or adding a base station (see Tayloe claims 14 and 17), changing an antenna array (see Tayloe claim 19), increasing or decreasing power of transmission (see Tayloe claim 19) or the like. Additionally, system hardware can be troubleshooted in response to a rapid change or degradation as discussed at col. 7, lines 4-16. More generally, Tayloe addresses adjusting the communication and electromagnetic coverage as claimed in his claims 1 and 2, for example.

By contrast, the base station of claim 1 of the present invention generates "a channel condition prediction . . . on an ongoing basis as conditions experienced by the mobile unit

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change" and utilize "the channel condition prediction to dynamically manage data transmission to the mobile unit." Data is not sent from the base station to a central unit which then produces an output, such as a pictograph, from which a system operator then chooses to make a system adjustment as in Tayloe. In claim 1, the base station automatically manages data transmission utilizing the channel condition prediction.

Claim 1 is not anticipated by Tayloe and is not obvious therefrom. Similarly, the base station of claim 7 employs a predictor which generates further channel condition predictions "on an ongoing basis" and further comprises "a scheduler for making dynamic adjustments based upon said generated future channel condition predictions to respond to changing channel conditions experienced by the mobile unit." Claim 8 addresses apparatus requiring a "computation module" which computes "a mean channel condition indicator . . . on an ongoing basis as conditions experienced by each mobile unit change" and "a scheduler for making dynamic adjustments based upon the generated channel condition prediction." Claim 11 has been similarly amended. All of these claims as amended clearly distinguish over Tayloe.

The Official Action correctly admits that Tayloe lacks a wide variety of features addressed by the dependent claims. Far from curing the deficiencies of Tayloe, Larsson represents the failure of others or teaches away from the present invention. The portion of Larsson's text at col. 5, line 34-col. 6, line 60 relied upon by the Official Action simply addresses adjusting weighting factors applied to mean calculations. There is no suggestion of assigning a greater emphasis to the most recent channel condition in the manner presently claimed. At the top of page 6, the Official Action correctly admits as much. However, Larsson specifically